

Environmental Performance Data

Changes

NOF Group

Item	Unit	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Production volume	[thousand tons]	242	245	266	267	259	229	249	226	209	210
Total energy input	[thousand GJ]	3,444	3,431	3,464	3,477	3,330	3,247	3,377	3,112	2,909	2,903
Renewable energy input*	[thousand GJ]	—	—	—	—	—	—	—	—	640	390
Non-renewable energy input*	[thousand GJ]	—	—	—	—	—	—	—	—	2,269	2,513
Total substance input	[thousand tons]	263	267	280	273	253	231	261	236	248	226
Water resource input	[thousand m³]	7,385	7,621	7,475	7,476	7,627	7,699	7,834	7,964	7,833	7,886
Greenhouse gas emissions	[thousand tons of CO₂]	195	202	207	205	196	187	189	175	159	151
SOx emissions	[tons]	8	9	7	7	6	4	5	7	8	5
NOx emissions	[tons]	62	93	65	64	55	57	55	55	58	46
Soot and dust emissions	[tons]	3	5	4	5	5	8	4	5	3	4
VOC emissions	[tons]	—	—	—	—	—	—	—	—	—	190
Emissions of hazardous air pollutants	[tons]	—	—	—	—	—	—	—	—	—	89
BOD emissions	[tons]	105	79	160	69	74	104	93	67	74	58
COD emissions	[tons]	318	225	314	302	441	219	154	148	171	153
Suspended solid emissions	[tons]	41	39	32	50	37	40	36	25	58	43
Waste quantity from plants	[tons]	24,719	25,567	27,947	30,161	28,446	28,955	29,164	25,157	22,542	24,298
Internally recycled quantity	[tons]	3,929	1,177	1,190	955	1,182	1,165	953	914	976	840
Externally recycled amount	[tons]	14,704	17,055	17,645	19,253	16,426	17,808	17,687	16,547	14,444	15,555
Final disposal quantity by landfill	[tons]	1,260	1,333	1,168	1,046	1,302	1,588	950	1,092	617	1,058
Hazardous waste volume	[tons]	—	—	—	—	—	—	—	—	—	23
Emissions of PRTR Act-controlled substances	[tons]	187	170	167	177	158	147	155	143	167	135

*Data collection began in FY2023.

Environmental Performance Data

Domestic group

Item	Unit	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Production volume	[thousand tons]	217	219	231	232	225	194	210	188	179	181
Total energy input	[thousand GJ]	3,016	3,018	2,987	3,004	2,917	2,810	2,892	2,699	2,570	2,543
Renewable energy input*	[thousand GJ]	—	—	—	—	—	—	—	—	339	328
Non-renewable energy input*	[thousand GJ]	—	—	—	—	—	—	—	—	2,231	2,215
Total substance input	[thousand tons]	263	267	280	273	253	231	261	236	217	196
Water resource input	[thousand m³]	5,787	5,941	5,718	5,767	5,771	5,815	5,862	6,001	5,959	5,892
Greenhouse gas emissions	[thousand tons of CO ₂]	182	181	173	172	169	158	159	144	135	133
SOx emissions	[tons]	7	9	6	6	5	3	3	4	6	3
NOx emissions	[tons]	60	90	62	60	52	53	50	51	54	41
Soot and dust emissions	[tons]	3	4	3	2	1	2	1	1	1	1
VOC emissions	[tons]	—	—	—	—	—	—	—	—	—	190
Emissions of hazardous air pollutants	[tons]	—	—	—	—	—	—	—	—	—	89
BOD emissions	[tons]	39	28	40	43	33	38	52	39	36	25
COD emissions	[tons]	78	68	73	66	60	60	68	44	52	55
Suspended solid emissions	[tons]	41	39	32	50	37	40	36	25	42	31
Waste quantity from plants	[tons]	20,508	21,351	23,466	25,976	23,662	24,176	23,796	21,270	19,300	20,979
Internally recycled quantity	[tons]	3,929	1,177	1,190	955	1,182	1,165	953	914	976	840
Externally recycled amount	[tons]	14,576	16,696	17,267	18,676	16,002	17,320	17,138	15,916	13,679	14,605
Final disposal quantity by landfill	[tons]	111	157	117	95	81	681	135	61	69	72
Hazardous waste volume	[tons]	—	—	—	—	—	—	—	—	—	23
Emissions of PRTR Act-controlled substances	[tons]	187	170	167	177	158	147	155	143	167	135

*Data collection began in FY2023.

Environmental Performance Data

NOF

Item	Unit	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Production volume	[thousand tons]	198	200	211	211	205	178	191	170	162	164
Total energy input	[thousand GJ]	2,753	2,739	2,728	2,753	2,673	2,572	2,658	2,471	2,358	2,315
Renewable energy input*	[thousand GJ]	—	—	—	—	—	—	—	—	327	312
Non-renewable energy input*	[thousand GJ]	—	—	—	—	—	—	—	—	2,031	2,003
Total substance input	[thousand tons]	243	248	259	253	233	214	244	218	202	181
Water resource input	[thousand m³]	5,236	5,348	5,223	5,258	5,227	5,254	5,303	5,473	5,463	5,350
Greenhouse gas emissions	[thousand tons of CO ₂]	166	164	158	157	155	145	146	131	123	120
SOx emissions	[tons]	3	4	3	3	3	1	2	3	5	2
NOx emissions	[tons]	58	88	59	58	50	51	48	49	53	41
Soot and dust emissions	[tons]	2	2	2	2	1	2	1	1	1	1
VOC emissions	[tons]	—	—	—	—	—	—	—	—	—	143
Emissions of hazardous air pollutants	[tons]	—	—	—	—	—	—	—	—	—	57
BOD emissions	[tons]	35	25	37	39	30	34	50	37	33	24
COD emissions	[tons]	78	68	72	65	60	60	67	44	52	55
Suspended solid emissions	[tons]	33	31	25	35	31	33	31	22	36	26
Waste quantity from plants	[tons]	19,716	20,350	22,372	25,061	22,721	22,529	22,822	20,493	18,464	20,222
Internally recycled quantity	[tons]	3,929	1,177	1,190	955	1,182	1,165	953	914	976	840
Externally recycled amount	[tons]	14,017	16,132	16,355	17,965	15,235	16,489	16,374	15,242	12,939	13,935
Final disposal quantity by landfill	[tons]	60	66	61	60	50	40	54	37	48	65
Hazardous waste volume	[tons]	—	—	—	—	—	—	—	—	—	21
Emissions of PRTR Act-controlled substances	[tons]	143	123	121	127	118	111	117	109	129	100

*Data collection began in FY2023.